

**A STUDY OF ORGANIC TEA CULTIVATION: A CASE
STUDY OF SANKHEJUNG VDC, ILAM DISTRICT,
NEPAL**

A Thesis

Submitted to

Central Department of Rural Development

**Faculty of Humanities and Social Sciences in Partial Fulfilment of
the requirements for the Degree of Master of Arts
in Rural Development**

Submitted by

ICHCHHA RAM ACHARYA

Exam Roll No. : 281007

Regd. No.: 7-1-1-703-2001

Central Department of Rural Development

Tribhuvan University, Kirtipur

Kathmandu, Nepal

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DECLARATION

I hereby declare that the thesis entitled **A Study of Organic Tea Cultivation : A Case Study of Sankhejung VDC of Ilam District** submitted to the Central Department of Rural Development, Tribhuvan University is entirely my original work prepared under the guidance and supervisor of my supervisor. I have made due acknowledgement to all ideas and information borrowed from different sources in the course of preparing this thesis. The result of this thesis have not been presented or submitted anywhere else for the award of any degree or for any other purpose. I assure that no part of the content of this thesis has been published in any form before.

Ichchha Ram Acharya

TU Reg. No: 7-1-1-703-2001

Date:



TRIBHUVAN UNIVERSITY
त्रिभुवन विश्वविद्यालय
CENTRAL DEPARTMENT OF RURAL DEVELOPMENT
ग्रामीण विकास केन्द्रीय विभाग

विभागीय प्रमुखको कार्यालय
कीर्तिपुर, काठमाडौं, नेपाल ।
Office of the Head of Department
Kirtipur, Kathmandu, Nepal.

Ref. No.

Date मिति

RECOMMENDATION LETTER

This thesis entitled **A Study of Organic Tea Cultivation: A Case Study of Sankhejung VDC of Ilam District** has been prepared by **Mr. Ichchha Ram Acharya** under my guidance and supervision. I hereby forward this thesis to the evaluation committee for final evaluation and approval.

.....

Mr. Subhash Jha

Supervisor

Date:



TRIBHUVAN UNIVERSITY

त्रिभुवन विश्वविद्यालय

CENTRAL DEPARTMENT OF RURAL DEVELOPMENT

ग्रामीण विकास केन्द्रीय विभाग

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Office of the Head of Department
Kirtipur, Kathmandu, Nepal.

Ref. No.:

Date मिति:

APPROVAL SHEET

This thesis entitled **A Study of Organic Tea Cultivation: A Case Study of Sankhejung VDC of Ilam District** submitted by **Ichchha Ram Acharya** in partial fulfilment of the requirements for the Master's Degree (MA) in Rural Development has been approved by the evaluation committee.

Evaluation Committee

.....

Prof. Dr. Prem Sharma

Head of the Central Department

.....

External Examiner

.....

Mr. Subhash Jha

Supervisor

Date:

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ABSTRACT

This study entitled **A Study of Organic Tea Cultivation: A Case Study of Sankhejung VDC of Ilam District**. This study has been based on both primary and secondary and qualitative as well as quantitative data. This study has followed exploratory and descriptive research design. The primary data have been collected from Sankhejung VDC of Ilam district and secondary data have been used in the background of the study and setting of the study area to know the impact of organic tea cultivation of district. This study has been done to find out the impact, present situation and problems faced by tea farmers. From the Ilam district was selected purposively. 140 hhs were found tea farmers among them 50 hhs were taken by using simple random sampling method under the probability sampling. The data have been collected systematically. The data were analyzed in two ways descriptive and analytical. Ms Excel program was used for analysis purpose. Diagram and graphs are used for the presentation of data in this study.

This study has found that most of the organic tea farmers are interested to organic tea cultivation, many farmers has been attracted toward tea cultivation in the study area, tea growers and production has been increasing. In this study area out of 50 hhs 40 percentage households have 0-10 ha. land, 26 percentage households have 10-20 ha., 20 percentage have 20-30 ha., 10 percentage have 30-40 ha. and 4 percentage households have 40-50 ha. land.

The study in this thesis farmers are facing many kinds of problems like was economic, marketing and transportation etc. Also, they are facing lots of challenges in tea garden. Desertification, soil erosion, landslide, flood are main challenges in the cultivated area.

In this study area farmers are interviewed in tea farming, they are trying to solve the problems but that's not enough so in this situation it we provide to technical knowledge, financial support, training etc. Its helps to improve their life style as well can play important role for the economic development for our country.

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ACRONYMS/ABBREVIATION

A.D.	–	Anno Domini
ADS	–	Agricultural Development Strategy
B.S.	–	Bikram Sambat
CTC	–	Crushing Teasing Curling
EEC	–	East European Country
FGDs	–	Focus Group Discussion
GDP	–	Gross Domestic Product
GMO	–	Genetically Modified Organism
ha.	–	Hector
hrs	–	Hours
KG	–	Kilogram
km	–	Kilometer
Km ²	–	Kilometre Square
M.	–	Metre
mm	–	Millimeter
No.	–	Number
NTCDB	–	Nepal Tea and Coffee Development Board
NTDC	–	Nepal Tea Development Corporation
P. Ltd.	–	Private Limited
Rs.	–	Rupees
S.N.	–	Symbol Numbers
SAARC	–	South Asian Association for Regional Cooperation
sq. km.	–	Square Kilometer
sq/km	–	Square Kilometer
USA	–	United States of America
VDC	–	Village Development Committee
WTO	–	World Trade Organization
yrs	–	Years
%	–	Percentage
°C	–	Degree Centigrade

CHAPTER- ONE

INTRODUCTION

1.1 Background of the Study

Nepal is a land-locked country bounded by the People's Republic of China in the north and by India in the East, west and south. The total area of the country is 1,47,181 sq.km. Nepal is located between 80 degree to 88 degree east longitude and 26 degree to 30 degree North latitude. The Himalayan region ranges in altitude between 4877 and 8848 meters covered by snow throughout the year out of 10 highest peaks, 8 peaks are in Nepal. It has very diversified climate and topographical features, comprising of the highest peak of the world viz, the Mount Everest at 8,848m. descending down to about 60m. at Kechanakalan in Jhapa district of Nepal. The climate of Nepal is therefore diversified as per the latitudinal differences.

Government of Nepal (2065 B.S.) stated that being land-locked country, the economy of the Nepal is based on agriculture. About 80% of the export consists of agriculture products. Agriculture dominates the economy of Nepal contributes for about 36% of gross domestic product, provides employment opportunities to more than 80% economically active population.

In this background, agriculture is the major occupation of the Nepalese People. Most of them are dependent on agriculture sectors for their economic prosperity. Economic prosperity is not possible without agriculture prosperity. Agriculture is therefore a backbone of national economy of Nepal. The cultivation has become an integral part of agriculture system, mostly in eastern part helped to enhance the rural economy of Nepal. The tea cultivators feel their living standard has increased over the past few years due to the tea cultivation as a cash crop tea can be planted even in slopy areas as well, despite of its ever green beauty which it can check the soil erosion and landslide in hilly areas. Cash crops plantation in general and tea cultivation in particular, play a major role in increasing overall agricultural production.

Panta (2065 B.S.) mentioned that tea cultivation and its drinking habit are said to have originated in China. After that, it was introduced to the world. The drinking habits

spread later to Japan, Tibet and whole of china. After 5th century, it was introduced in Europe by the Dutch in 17th century and its drinking habits spread through European empire in the world.

tea cultivation in Nepal is 147 years old. It produces orthodox and CTC types of black Tea. Orthodox tea is produced in hills at an altitude above 1500m. In Nepal, districts such as Ilam, Panchthar, Jhapa, Dhankuta and Terathum is the main site of production. Other districts cultivating orthodox are Nuwakot, Sindhupalchok, Ramechap, Sankhuwasabha and Kaski. Efforts are being made to develop Tea estates in some other districts as well. Nepal produces about 1.97 million k.g. orthodox tea. It is chiefly exported to countries like, Japan, Germany, USA and India (Pant, 2065 B.S.).

Nepal has a long history of tea cultivation, initiated with the establishment of Ilam Tea Estate in the Hills of Ilam District 1963 and Soktim tea estate in the plains. As per the recorded information, Mr Gaj Raj Singh Thapa in 1920 B.S initiated a tea cultivation practice in Ilam by bringing seed and plants from Darjeeling prang hills. Previously there were only two gardens in Ilam, namely Ilam and Soktim.

First tea plantation at private tea sector in Terai was established in 1959 and was with the name of Buddhakaran Tea Estate. Nepal Tea Development Corporation (NTDC) was established in 1966 by the His Majesty's of Government. His Majesty King Birendra Bir Bikram Shah Dev declared the five district i.e. Jhapa, Ilam, Panchthar, Terhathum and Dhankuta of the eastern development region as 'Tea Zone' in 1982. The National Tea and Coffee Development Board (NTCDB) was established in 2050 B.S is the public agency of responsible for developing and promoting tea plantation in Nepal.

Panta (2065 B.S.) further stated that Nepal Tea Development Corporation (NTDC) inherited the historically Ilam and Soktim tea estates and established five new Tea gardens since 1985 occupying 951 hectors of land and by now the management is privatized.

Both of big and small tea gardens which are in the private Tea estate and the area is estimated to be about 16000 hectares with an annual production of 13688m.t of made tea registered out of 140 Tea estate would have contribute to 85% of the National

production volume. Nepal has 40 Tea processing factories in private sectors. They produce both orthodox and CTC Tea.

As per the statistics, more than 67% of the orthodox produces are small formers and their contribution in the production is more than 60% other than small formers, there are five private tea estates with processing facilities, processing facilities without Tea estates and tea estates without processing facilities. Altogether there are 16 modern tea processing facilities and out of them 11 are in Ilam. There are two in Dhankuta, two in Panchathar and one in Kaski (Pant, 2065 B.S.).

Nepal has become member of WTO in 2004 A.D. As a member of tea business, it has to produce both types of Tea (Orthodox and CTC) of definite quality as define by the respective country. Each country importing tea from Nepal has set standard for made Tea. The standard is in production, products, presentation, packaging and chemical quality of finished products. Tea is produced in many countries of world like India, China, Kenya, Sri Lanka, Bangladesh, Indonesia Japan, Turkey, Vietnam and Argentina etc. Nepalese Tea is exported to different countries of the world especially Germany, France, Japan, U.S.A, Belgium, Sweden, Czech Republic and other countries.

1.2 Statement of the Problem

Yet, tea plantation has success history in Nepal, as a trend of Tea farming is become popular in different place of the country. It has been taken as long term cash crop plantation. Tea is one of the major exportable cash crops and habitual consuming crop by every person throughout the country. It plays a significant role in the economic life and development process on the other hand it plays the most important role to preserve the environment. The production of tea in the eastern part of Nepal like Jhapa and Ilam have taken place due to the Geographic as well as cultural environment.

Tea can be planted in both in Hilly and Terai Region. It preserves the natural environment as well as protect from landslide and others natural disasters. There is high demand of Tea in internal and external market. The potentiality of tea is high. In spite of this, tea industry in Nepal is not much successful and is not able to meet the

internal demand. Though, it's cultivated from one half century, Nepal does not produce processed tea in quality as desired by the market. Small farmers are not well equipped to produce quality green leaves that are desirable to manufacturer quality mode tea in Nepal. The tea leaves produced by tea estates having processing facilities are also not qualitative to produce a good quality made tea.

Thus, the emerging spatial aspects of tea cultivation, its trend and how will the socio-economic status will affect the cultivation of tea area some of the issues of interest moreover, it is also essential to study the problems and prospects of tea cultivation so that the farmers and other would be aware and take appropriate plan of action:

- What is the practice of organic tea production in Nepal?
- What is the role organic tea farming on environment?
- What is the problem of organic tea farming?

1.3 Objectives of the Study

The main objectives of the study is to appraisal the status of tea farming in Nepal and to suggest recommendations based upon findings. The specific objectives of this study are.

- a. To analyze organic tea production practices in Sankhejung VDC of Ilam district, Nepal.
- b. To find out the organic tea farming and it's role on environment.
- c. To find out the problems and challenges in organic tea production and marketing.

1.4 Significance of the Study

Tea plantation in any rural areas brings about a healthy socio- economic situation. The Tea industry provides employment to the major fraction of the rural population there by checking the influx of migration problems. It further provides business opportunities to another half of the population in a number of ways directly and indirectly. Various link roads needs by the tea estates for their day to day operation

also contribute to the development of rural areas. The industry with its labour welfare program provides the workers or the rural population with education and hospital facilities. Tea farming is also an export oriented industry. Its development would be help in correcting trade imbalances of our country. There is no doubt that the development of tea industry would contribute a great deal of our Country's economy. It helps to earn foreign currency by exporting tea to the foreign countries especially in European countries like Britain, the Netherlands and other Countries.

It has been realized that tea cultivation in Nepal can be one of the best sources of national income through foreign earnings on the one hand and as an item of production helpful in import. The substitution on the others until few decades ago. The agro-based industry was so neglected that even the people of Nepal hardly hoped that tea in this country could be hardly show such remarkable prospects for earning exchange in near future.

Tea is cultivated in eastern part of Nepal and it is one of the major exportable cash crops. But Nepal is unable to acquire enough foreign currency and on the other hand the current production is unable to meet the whole domestic demand. Tea industry has provided employment in Nepal. So this study would be helpful for betterment and improvement to the existing condition of tea industry and tea former who are facing different types of problem.

It is assumed that study carry on an important sector of agriculture, i.e. tea cultivation and marketing. It is can also guidelines to other agricultural sector of Nepal to improve deteriorating economic status to the country by increasing per capita income.

It is also hope that this study will be helpful in formulating plans and projects for further development the tea industry. It endeavors to present a picture of the past conditions and present situation sufficiency to the tea industry. Tea cultivation plays an important role to check the soil erosion. Tea is green and deep-rooted plant. The roots of the plant go inside the soil surface so it helps to protect the land sliding problem and protect soil erosion. It also provides the valued greenery and thus in a natural pollution checker. In an overall analysis Tea farming brings about a pleasant social harmony and actually builds a society and therefore a Nation. Tea cultivation

also plays important role for self-sufficient in Tea, adequate employment, attract visitors and make good export earnings.

1.5 Organization of Chapters

For the systematic presentation this study would be divided into five chapters as follow:

Introduction – It is the first chapter which includes general background of the study, statement of the problem, objectives of the study, significance of the study and limitations of study.

Review of Literature – It includes review of previous studies of literature contains the review of related book, reports, journal and previous thesis etc.

Research Methodology – This third chapter deals with research design, population and sample, data collection procedure and processing, tools and methods of analysis.

Description of the Study Area – In this chapter short description of chapter five presentation and analysis of data.

Presentation and analysis of Data – In this fifth chapter, includes collected data and process are presented analyzed and interpreted.

Summary, Conclusion and Recommendation – In this chapter summary of whole study, conclusion and recommendation would be presented.

CHAPTER- TWO

LITERATURE REVIEW

There are several Scholars' reporters and academician who have made contribution to the literature pertaining to tea plantation, production and marketing but there are very few studies related to the status of tea farming in various aspects of tea production.

2.1 Some Related Literature Review

Tea is one of the major cash crops in Nepal. Specially, it plays the vital role in the national economy. Due to its popularity in international market and national market, the demand of the Tea in general, is increasing. Therefore it is necessary to develop the country through industrial development by giving emphasis on development.

Subedi (2057 B.S.) described that there are several scholar's reporters and academician who have made contribution to the literature pertaining to Tea farming, producing, processing and marketing but there are very few studies related to the Tea farming in Nepal in various aspects of Tea production.

Tea is main sources of polyphenes which act as antioxidant. The anti-oxidant activity of polyphenes has been shown by scientific research to play a beneficial role in a number of prevent cardiovascular disease, strokes and certain types of cancer. Whilst it cannot be claimed categorically that Tea delivers these benefits, there is an increasing weight of scientific evidence which suggest that it can play an effective role.

NTCDB (2002 A.D.) described that the cultivation of Tea had began more than hundred years ago in eastern region of Nepal but it comes as Industry after the establishment of NTDC with the objectives of bringing self sufficiency by producing best grade of Tea to earn foreign currency, Nepal Tea and Coffee Development Board in its recent bullet in pointed out others new areas for tea cultivation. It mentions districts as Gorkha, Nuwakot, Sindupalchock, Sinduli and others districts also are suitable for tea farming.

Amatya (1975) in his book cash crops farming in Nepal dealt with the growth of individual cash crops farming and attempted to show the distribution pattern of each crop including tea. Lastly he made some suggestions for the development of cash crop farming in the country. He suggested that tea can play an effective role in the national economy due to its popularity in national and international market, should give emphasis on industrial development.

Joshi (1978) said tea leaves are picked in cheap skilled labors and brought to factory for blending. Blending is done different fashion so as to bring a variety of product which is most for export and others for domestic consumption.

Shrestha (1982) makes general survey of the growth of Tea production in Nepal. Her dissertation is specifically concern with production. Performance of (NTDC) over time. He study found that with the establishment of public and private sectors Tea estates production of Tea has been gradually increasing and this has been capable to substitute imports to satisfactory extent. Further it has found that the present import volume of Tea is much lesser than what is used be during yearly seventies.

However, there is qualitative improvement in Nepalese tea in general. About domestic tea prices, it was found that tea prices in Nepal are directly attested by the price of Indian tea. On an average the Nepalese tea was found to be cheaper than the imported products and this had favorable impact on the domestic market. On the export prospects of Nepalese tea the researcher concluded that " There is ample export market for Nepalese Tea and many prospective foreign markets have not yet been tried.

Koirala (1983) showed the total Land under Tea cultivation has been extended considerably during the period of last twenty years. Consequently its production as well as consumption also has increased significantly. Again, he said the people have become more optimistic and more attention has been given to Tea plantation.

Chhetri (2004) studies found that the trend of Tea planting in this district is growing Steadily despite of various problems they encounter.

Almost all the villages have Tea planting in their owned land. At present farmers have started to plant Tea even their agricultural land despite of food crop planting.

The researcher further concluded that the interest of Tea planting is rapidly growing among the farmers of this district. They believe that Tea cultivation is sustainable means of uplifting their living standard. It is essential to exported Tea of Nepal has received good market but it is not promoted properly internationally.

Tea development requires a combination effort of government exporters, processors and Tea cultivars/farmers. A gap in activities in production, Processing, export and communication problem are equally damaging to all the stakeholders. Therefore transparency in activities and benefits, involvement of more small farmers and their representation is required to develop a synergetic effect in the chain

In the context of globalization of business and trend of privates sectors. Led development, the role of government as facilitators plays important role in place where majority of small farmers and where development activities has value to build base for commercialization of agriculture.

The infrastructure, the policies on production and export, knowledge, experience in technology and management, stable political system and above all desire of the industries and hardworking people were surely bring anticipated results.

Nepal is an underdeveloped agricultural country where the agriculture sector is very much backward and traditional, and it does not follow the modern technology fairly. Therefore it is necessary to developed the country through cash crop agriculture. Tea is a cash crop which is the primary necessities from the economic point of view and as demand fulfilling means of majority of population. Tea plantation was started in very earlier but it came as industry after the establishment of NTDC with the objectives of bringing self-sufficiency by producing best grade of tea to earn foreign currency.

The cultivation of tea had begun more than 1.5 century ago in the eastern region of Nepal. Nepal Tea and Coffee Development Board in its recent bulletin pointed out other new areas for tea cultivation. It mentions some districts as Gorkha, Nuwakot, Sindhupalchok, Sinduli etc. which are suitable for tea farming.

Kansakar (1985) concluded that Nepal's tea plantation is characterized by very slow progress owing to the emergence of tea estates under private sector during late 1950's and early 1960's. Again he said "tea plantation in Nepal has been going on without

scientific experiments. The lack of such scientific experiments are the main reasons behind low yield of tea and the very slow development and expansion of tea plantation in Nepal.’’

Arunachalam (1995) The natural home of the tea plant is in the area of monsoon climates, where there is warm, wet-summer and a cold, dry or less wet winter. If the difference between the daily average temperature in January and July is more than about 11°C, The tea plant has a dormant period or a slow growth in the cold months, during which the harvesting of tea leaf becomes uneconomical. Temperature of Hankow, Tocklai, Vientiane, Laos are indicative of the habitat of the tea plant. Same the climates are in Ilam, Panthar, Dhankuta, Teharathum, Sindupalchook and Jhapa of Nepal.

Baskota (2009), one hand organic tea production in Nepal is difficult factor, on the other hand it is difficult to marketing. Market of organic tea is not only internal it is based on international.

Acharya (2009), Organic agriculture is a production system that sustains the health of soils ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local condition rather than the use of inputs with adverse effects. Organic tea farming is based on four principles that are principle of health, principle of ecology, principle of fairness and principle of care. Organic tea farming promotes and enhances biodiversity, biological cycles, soil biological activity through management practices that resort, maintain and enhance ecological harmony. The organic tea production system is different from non-organic tea production.

Oli (2009), The industrial revolution, the tea production was started from western countries. organic agriculture system was the cause of pollution. The pollution threats animal and plants health. Rasel Karson research the dangerous result of pesticide and she advice the organic agriculture system. increase the productivity of agriculture farmer must be use organic fertilizers monaural and pesticide.

Gajmer (2009), Eastern part of Nepal is the tea zone of country. The tea plantation was 157 years old, which is in Ilam. Though tea cultivation farmers economic status and living standard is increasing. Tea cultivation has given an opportunities and

job as a half of the total population in this district. But tea cultivation system must be develop as the demand of national and international market.

Sapkota (2011), State that development of agriculture sector mainly depends on modernization and commercialization. To grab the opportunities from the global market, their agriculture product should be competitive. As regard to tea which is high value agro-product and export potential product of Nepalese agriculture it is facing the various problems.

Subba and Ghimire (2011), Organic agriculture is not easy agriculture system. The area of organic is around by buffer zone. The buffer zone must be surrounded minimum 100m pre-conversion period must be 10 years. It is necessary to calculate the input which are used in conversion period.

Acharya (2012), Organic agriculture is one of several approaches to sustainable agriculture development practiced today, which is ecologically sound economically viable and socially just. The Nepal has gone some six decades with the popular paradigm of commercialization of agriculture but gone nowhere-instead embracing such grotesquely destructive green-revolution approach it remained at the bottom end of the overall agriculture development indicator. The conventional agriculture focused merely on increasing yield to meet growing food needs of increasing population, and paid little concerns to sustainable use of locally available natural and human resources. The resulted in intensive and indiscriminate use of agro-chemical inputs; agricultural lands continued to shrink, and farming system led to environmental degradation such as depletion of soil and soil fertility, decline in water availability and increase in different forms of pollution, At the same time, such practice upset both environmental resources and indigenous knowledge system rendering the agriculture system unsustainable and sub-productive.

In fact it is increasingly becoming more difficult to come up with the forces of world market in a time when monopoly power of some large corporations is increasing in food system. Again, given the exaction socio-economic structure of Nepalese peasantry, which is characterized by preponderance of small scale farmers and large area of land under hill and mountainous formation, and quite apathetic congaing trend of real-satiation of land and cultural devaluation of labor in the society, the

conventional approach of agricultural policy is not going to work anymore, It calls for alternative way of farming that should consider farmers as an active element of decisions making not as the passive entity in the recipient end. A good agricultural strategy for Nepal can be prepared through an active involvement of farmers, their representatives and those policy makers who have realized the follies of donor-dominated visions.

Organic agriculture is still in the early stages in Nepal. The importance of organic agriculture is being realized not only by farmers who have been using chemical fertilizer and pesticides for the last four decades but also by the policy makers, intellectuals and sensitive citizens after observing the deterioration situation in the agriculture sector. The ever rising price of chemicals (fertilizers, pesticides, etc). is another important factor for farmers looking for alternatives in order to sustain their farm productivity ad livelihoods. Moreover, Nepal is largely dependent on climate-sensitive sectors, such as rain-fed agriculture; its fragile mountain ecosystems and peculiar topography has drawn attention no the organic farming. Increasing use of agro-chemicals, higher production cost and deterioration ecosystem health have advocated the need to change traditional and external input use agriculture towards safe and sustainable organic production. Several small scale researches have revealed that consumers are actually willing to pay premium prices for organic products thus dismissing the possibility of not getting proper prices in market. So far establishment of commercial organic farming in Nepal was started in the early 1990s. Though farming accounts for small segments in terms of both acreage and production, it is gaining momentum for its ecological importance and economical opportunities. Recently, there have been growing interests from both government and non-government sector at different levels for it's promotion, and farmers have been growing different organic crops individually or collectively. The common practices adopted by the organic growers are crop rotation, natural pest management and using bio- fertilizer and organic manures mainly farmyard manure ,natural pest management and using bio-fertilizer and organic manures mainly farmyard manure ,vermin-compost and green manure in soil fertility management. The major organic products grown in Nepal and available in the market are tea , coffee, ginger, fresh-vegetable, honey and herbal products. Fortunately, many agricultural products especially in the hills area organic by default. And there is systematic focus on

organic farming in tea and coffee after the establishment of National Tea and Coffee Development Board. The organic tea though its supply is lagging much behind its demand, is being exported in several countries in reasonable price.

Even a cursory outlook in the different plans and policies reveals they are not encouraging organic farming in the mass scale. Till date, the Agriculture Perspective Plan (1994/95-2017/18) has been considered as a guiding strategy towards agricultural development in the country that aims at achieving increased agricultural economic growth through priorities on intensive use of limited inputs essentially non-organic. The plan is basically apathetic to organic development of agriculture since harnessing comparative advantages of available resources through organic agricultural products is not possible under exaction system of indiscriminate markets for organic and inorganic products in the country. The 10th Plan (NPC, 2003) and National Agricultural Policy (MOAC, 2004) have, for the first time, spelt out policy statements regarding promotion of organic farming in the country. The Agriculture Policy, 2004 has policy statements for encouraging organic farming, supporting organic products certification minimizing adverse effects of agrochemicals in livestock products, land, water and other aspects of environment, improving production and usage of organic manure, enhancing local participation in food quality management and regulating use of pesticides and Genetically Modified Organisms, GMO. The then and succeeding periodic plans emphasize on promoting integrated plant nutrients and pest management and mentions the explicit health concerned. But their implementation is apathetic. At a time writing this piece, a long-term document of agricultural sector, Agricultural Development Strategy (ADS) is being hatched among the top bureaucrats with millions of rupees in their coffer. It is not yet in public domain that which approach they are emphasizing for promoting agriculture sector, we are now in position to create pressure for eco-friendly and sustainable approach to protect our life and livelihood.

At last integration policies in organic production promotion and trading is crucial. Implementation of organic standards and certification programs, demarcated organic production zones organic-inorganic price dissemination, necessary institutional arrangements and identification of priority activities are important. The most

important thing is to acknowledge we have alternatives that protect the Earth, protect our farmers, and protect our health and nutrition.

CHAPTER- THREE

RESEARCH METHODOLOGY

3.1 Introduction of the Study Area

The study of this area focuses the status of tea farming in Nepal. The selected tea farming area of the different part of the country is taken for the study area of this study. In Nepal since 1920 B.S. the plantation of tea was started from Ilam district. It has a long history, It contributes the socio-economic and employment generating activities in that particular areas. Thus the area is selected for the study because it was a major cash crops in the country and create income generating and employment opportunities as well.

3.2 Research Design

To meet the objective of the study descriptive and exploratory research methodology is adopted. This study is depend upon the response of the respondents. Since the aims at findings out about price value and quantities of production to compare up to five years time duration. And field study would be also conduct. The research design would be also historical in nature.

3.3 Nature and Sources of Data

In this study, both qualitative and quantitative data would be apply to come to the general conclusion. The study would base on the primary as well as secondary data.

3.4 Universe and Sample Size of the Study

Sankhejung VDC of Ilam district would take as the universe for the study but due to various constraints whole universe cannot be studied. So only the select area would be include as the research area, which are potential area/ places from the organic tea cultivation point of view. The respondents would those people who are well know have more knowledge and interest about organic tea products. Sample size would be

50 occupational individual persons of select VDC of Ilam district area on the basis of study.

3.5 Techniques and tools of Data Collection

3.5.1 Questionnaire Survey

A questionnaire is to ask for respondent. The respondents is requested to fill up the questionnaire. In case of the respondents who cannot fill up the questionnaire, questions is asked to the respondents and answer is filled up to collect the required data.

3.5.2 Key Informant Interviews

Educated persons and administrator is the sources of special information in this survey. To derive some specific information, it would be necessary to visit some key persons. Generally, chairperson, executive director, facilitator, member of Himalayan Sangrila tea production P. Ltd. Ilam and leader tea farmer is key persons. A guideline would includes some structured and unstructured questions, would be use for key informant interview.

3.5.3 Focus Group Discussion

Focus group discussion is most essential for collection of qualitative information. Altogether five focus group discussions would carry out in this study. Different issues associate with tea cultivation is discuss with producer and another person of the area. A FGDs guideline is use for collect necessary data.

3.6 Field Observation

Each households selected in sampling are visited and observed. The data is recorded while observing the households their accessibility in "Sangrila Tea Farmer".

3.7 Methods of data Analysis

All collected data and information is analyze and presentation in the proper forms of charts, diagram groups and tables wherever necessary. In order to get the correct outcome and making the result useful, such tables and diagrams would have being interpretation as far as possible. To analyze the data average, percentage, standard deviation is used.

CHAPTER-FOUR

DESCRIPTION OF THE STUDY AREA

4.1 Brief introduction of Sangrila Tea Farmers Co-operative Association

Working field : Sankhejung VDC ward no. 7 of Ilam district.

Elevation: From sea level 1801 M.

Total area : 84.42 km²

Established 1999 (A.D)

Border, East:- Mangalare, Dhuseni, Powamajhuwa VDC.

West :- Amchoke, Phuyatappa VDC and Panchthar district

North :- Panchthar district

South :- Dhuseni, Gagurmukhe and LumdeVDC

- Landuse :-

Farming area :39.59 km²

Forest :- 1314 ha.

Rock, River 9.26 km²

Total 84.24 km²

- Famous River : Dewmai, Phakphok, Tewa, Hoyangama.
- Climate : Tropical & sub tropical
- Temperature : Average maximum 20⁰ c

Average minimum 5.5⁰ c and highly hills temperature might be less than 0⁰ c

- Average rainfall : 2395 m.m.

- Population and other

House No. :- 1630

Density of population :- 119.3 person/sq km.

Population growth rate :- 1.78%

Average family number :- 5

Literacy rate :- male :- 67.1%

female :- 52.3%

- Cast and language :- Bramhim, Chettri, Rai, Limbu, Gurung, Sherpa, Newar, Damai, Kami, Magar, Tamang
- Main Religion :- Hindu, Buddhist, Kirant
- Historical and cultural placeless :-
 - a) Mahabharat hill
 - b) Kuibhir, (Chamaita-7)
 - c) Sablithumka Tourist center (Ekatappa-5)
 - d) Deumai River
 - e) Dharmadhuwar Gupha (Phakphok-3)
 - f) Tinchule Tourist view (Phakphok-5)
 - g) Dewmi pokhari (Chamaita-6)
 - h) Ratna kumar surung (Chamaita6)
 - i) Thamdanda Chamaita-6
 - j) Rupatar gupha (Ekatappa-9)
 - k) Ranke Historical Bazar
- Road :-Peach-(Mechi hiway)Rakse to Rake-12 Km
Gravel-Ranke -Ravi Sadak -17 Km.
Other Sadak-Village linkage sadak(Ekatappa,Chamaita, Phakphok) 38-Km.
- Market :- Ranke, Dewrali, Ghurpisepanchami, Chauribazar, Tinjurebazar, Phalatebazar, Dokandanda, Kolbotedanda, and Puranopanchami,
- Administrative and banking facilities:- Ilam district office, Branch office Mangalbare
- Tea expansion plan sector :- Mangalbare (Panitar)
- Total tea cultivation area :- 180 ha. with private company and small farmer
- Total member of Sangrila Tea farmer :- male 20, female 20

Consultancies Location :- Kanchenjunga Tea Estate located in the Panchthar area of Nepal.

Source: Sangrila tea industry

4.1.1 Tea Development

At present there are 43 varieties of tea grown in Nepal, nine from seed stock and others being clones. There are two main types from the same botanical plant species, camellia, saneness which had been developed at the Indian Tea Research station and used extensively in Indian Tea garden which have been introduced to Nepal for planting in the two different growing areas. The clone varieties developed from cutting from mother bushes are used in the tea gardens in the Terai regions of Jhapa and Morang districts. There are ideally suited for the processing of CTC variety where the leaf is more succulent.

In the Hilly areas varieties from seed stock and used to propagate the nursery plants. These two have been experimented and developed India at their Tea Research station for Darjeeling region and introduced in Nepal. Their leaf is more leathery and during the changing climatic cycles, concentration of juices varies thus giving more aroma and flavor for limited periods.

Tea plantation in Darjeeling had started something in 1850's is a trial and commercially in 1852 by the British. Since then up to 1960's tea farming was more or less organically practiced and gained popularity at E.E.C. Countries for its excellent aroma which could not be produced in any other part of the globe because of its typical climate and soil. Character under favorable and healthy green environment. But unfortunately Darjeeling planters introduced the method of tea farming by applying synthetic fertilizers, plant protection chemicals and weedicides some times in sixties in almost all 86 running tea gardens covering approx 20000 hectors of land to bring down the production cost of tea. The result in terms of productions.

4.1.2 Essential Condition for Tea Cultivation

Tea is mainly grown in the tropical and subtropical regions of the world. The following are the geographical limitations beyond which the cultivation of tea is almost impossible.

4.2 Tea Production in Nepal

There are three sectors involved for the production of tea in Nepal. They are:

- i. Government
- ii. Private sector
- iii. Small farmers

Nepal Tea Development Corporation (NTDC) has been producing tea in Nepal at government sector being given lease to foreign company nowadays. more than 60 private tea estates are expanded in Jhapa, Ilam, Panchthar, Terathum, Dhankuta and Morang districts, The third types of producer are farmers who depend on small farmers Development project The project is implemented in Ilam (Fikkal, Jaspire and Mangalbare), Panchthar (lalikharka) Terethum (Solma). After this step, tea production is rapidly increasing in farmer level.

Private sector has become more active than government in tea production. Accordingly, the government established Nepal Tea Development corporation and entrepreneurs in the private Sector also began their career as tea entrepreneurs. Before the establishment of government owned NTDC's incorporating seven different tea estates. The private sectors had established five different Tea estates, namely Budhakaran, Giribandhu, Himalayan, Satighatta and Mittal Tea Eastate.

A large number of small holder farmer are engaged in growing tea in both areas; the CTC in Terai and orthodox in the hill districts. And their contribution in total production is increasing over the years as more small farmers are being attracted towards tea cultivation due to many reasons, including its profit stability compared to other subsisting crops particularly in the hill areas. It is estimated that they now account for 26.5% CTC tea production and 67.6% of orthodox tea.

4.2.1 Tea Production Sectors

There are three sector actively involved for the production of tea in Nepal. They are for the production of tea in Nepal. They are :

- a) Government sector
- b) Private sector
- c) Small farmers

NTDC (Nepal Tea Development Corporation) has been producing tea in Nepal at government sector. More than 70 private tea estates have been producing tea. Private tea estates are expanded in Jhapa, Ilam, Panchthar, Dhankuta and Morang. The third type of producers are farmers who depend on small farmer development project. The project is implemented in Ilam (Fikkal, Jsbire, Mangalbare) Panchthar (Lalikharka) Teharathum (Solma). After this step tea production is rapidly increasing in farmer scale.

Table No. 4.1

4.2.2 Tea Plantation and Production in Nepal (2010/2011)

S. N.	District	Garden		Small Farmers			Total	
		Plantation Area –ha.	Production K.G.	No. of Farmer	Plantation Area –ha.	Production K.G.	Plantation Area –ha.	Production K.G.
1	Jhapa	6198	1003601	954	2981	5191596	9179	15195197
2	Ilam	1380	531651	5839	4037	1187007	5417	1718658
3	Panchthar	391	94447	990	506	148049	897	242496
4	Dhankuta	240	54178	463	227	78944	467	133122
5	Terathum	40	6022	591	228	44011	268	50033
6	Others	1082	59491	686	141	38936	1223	98427
	Total	9331	1749390	9523	8120	6688543	17451	17437933

Sources : Tea Smarika (2068) N.T.C. D. B.

Table No. 4.1 sources that tea plantation production in Nepla is Eastern part of the country Namely Mechi and Koshi zone recently Nowakot and parts of country have been tea is planting.

Table No. 4.2

4.2.3 Orthodox and CTC Tea Plantation Area and Production in Nepal

S.N.	Type	Orthodox		CTC		Total	
		Plantation Area – ha.	Production K.G.	Plantation Area –ha.	Production K.G.	Plantation Area –ha.	Production K.G.
1	Tea garden	3133	745789	6198	10003601	9331	10749390
2	Small farmer	5139	1496947	2981	5191596	8120	6688543
Total		8272	2242736	9179	15195197	17451	17437933

Note : No of Tea garden – 133, No of Tea Processing unit – 42

Source :

- District Agriculture Development office Ilam
- District Co-operative Association Ilam
- NTCDB (National Tea and coffee Development Board)

Table No. 4.2 shows that the tea garden and production area of Orthodox tea is hill side of the country and CTC tea production area is Tarai

CHAPTER FIVE

DATA ANALYSIS AND PRESENTATION

5.1 Household Information

The population activities refer to the different aspects of the people living in a certain society and country. Age composition is a process of studying the population activities because the total population is divided into different age group married, unmarried, widow and divorce from the major age groups of the population in any society.

5.2 Analysis and Percent Production Practice

5.2.1 Respondents by Age Group

Table No. 5.1

Age group	No. of respondents	Percentage
Below 19 years	7	14
19-29 years	10	20
29- 39 years	13	26
39-49 years	8	14
49-59 years	12	24
Total	50	100

Sources : Field Survey, 2016

On the above table shows that in total 50 respondents is divided by age group. On the table below 19 years are 14 percent, 19-29 years are 20 percent, 29-39 years are 26 percent, 39-49 years are 16 percent and 49-59 years are 24 percent have been shows.

5.2.2 Respondents by Marital Status

Table No. 5.2

Marital status	No. of respondents	Percentage
Married	23	46
Unmarried	22	44
Widow	3	6
Divorce	2	4
Total	50	100

Sources : Field Survey, 2016

According to the table in total 50 respondents married are 46 percent, unmarried are 44 percent, widow are 6 percent and divorce have been 4 percent. WE can saw the rate of percentage married and unmarried is greater than widow and divorce.

5.2.3 Education Status by Age Group

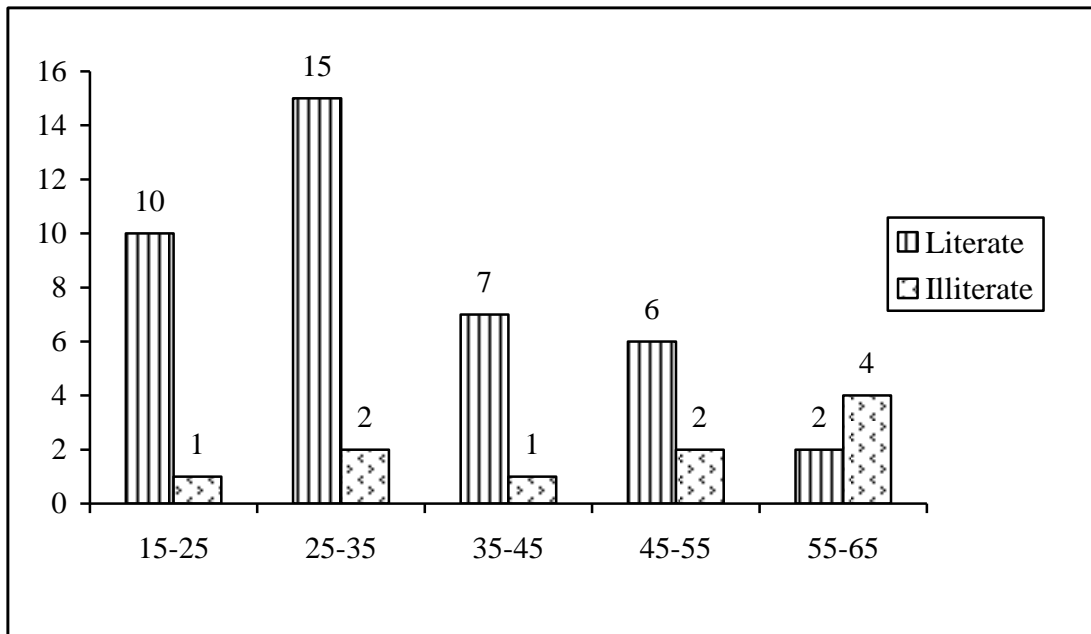
Table No. 5.3

Age group	15-25	25-35	35-45	45-55	55-65	Total respondents
Literate	10	15	7	6	2	40
Illiterate	1	2	1	2	4	10
Total	11	17	8	8	6	50
Percentage	22	34	16	16	12	100

Sources : Field Survey, 2016

The table shows that literate and illiterate people by the age group. On the table 15-25 years are 22, 25-35 years are 34, 35-45 years are 16, 45-55 years are also 16 and 55-65 years are 12 percent have been shows in the figure.

Figure No. 1



Sources : Field Survey, 2016

5.2.4 Cultivated Area with Farmers

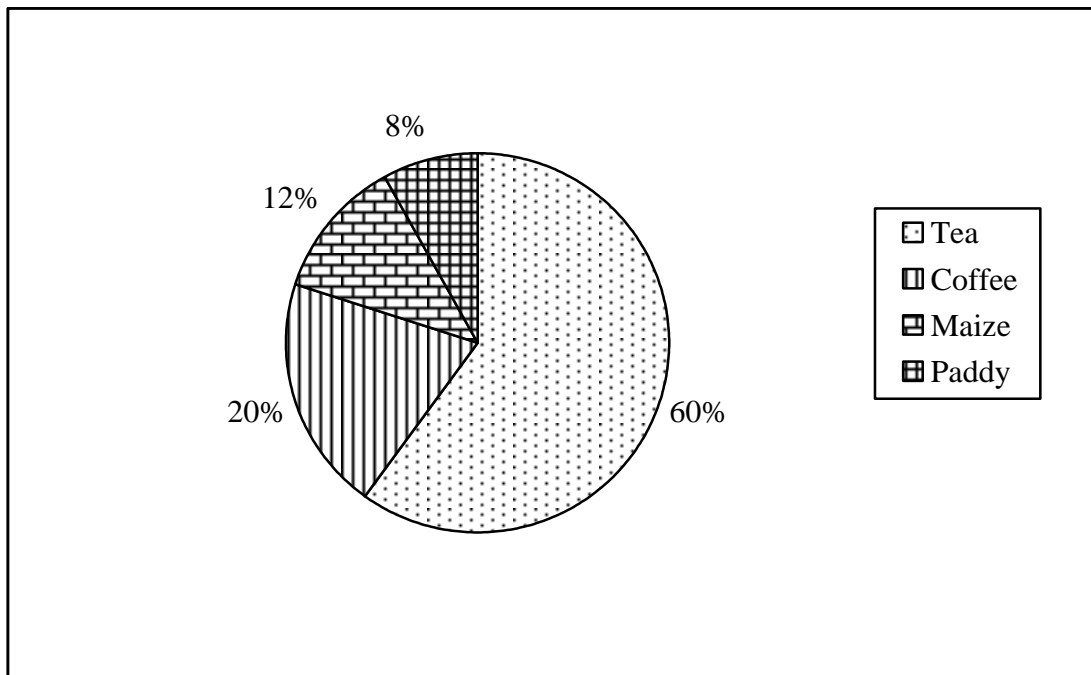
Table No. 5.4

Name of Crops	Cultivated area (in ha.)	No. of respondents	Percentage
Tea	80	30	60
Coffee	30	10	20
Maize	20	6	12
Paddy	10	4	8
Total	140	50	100

Sources : Field Survey, 2016

On the above table it shows that in total 140 ha land 60 percent respondents are grown tea in 80 ha, 20 percent are grown coffee in 30 ha., 12 percent are grown maize in 20 ha. and 8 percent respondents have been grown paddy crops on 10 ha. land. We can also show the following figure.

Figure No. 2



Sources : Field Survey, 2016

5.2.5 Tea Cultivated Area

On the table it describes about the area of cultivated land from tea farming in various types of land,

Table No. 5.5

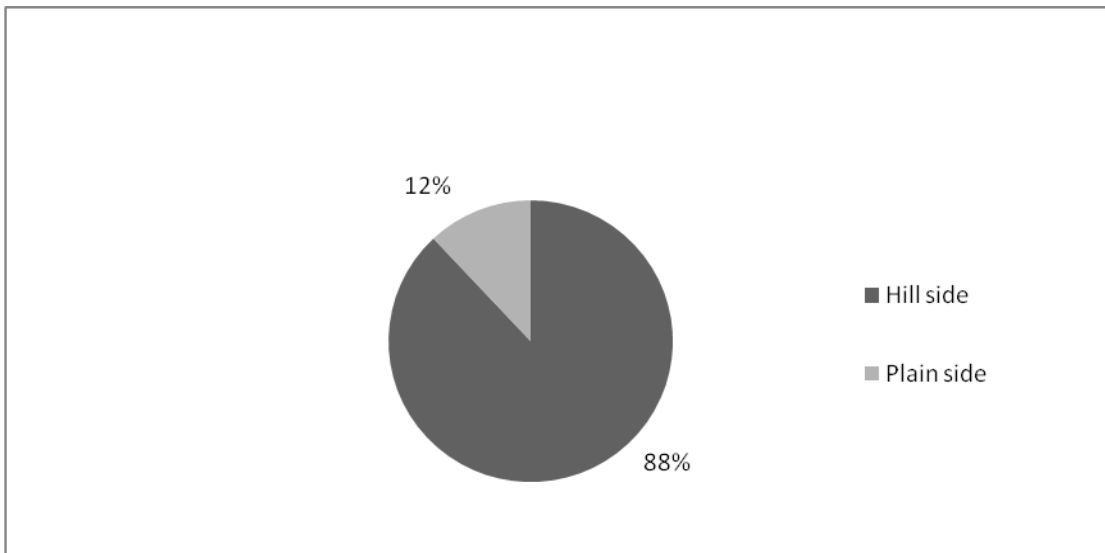
S.N	Status of land	land (in ha)	Percentage
1	Hill side	140	88
2	Plain side	20	12
	Total	160	100

Sources : Field Survey, 2016

In hill side 140, hectors of land had been covered for tea farming whereas in plain side it only covers 20 hectors of land. While the area of cultivated land covered for tea farming in hillside seems to be about 88 percent in plain side only 12.5 percent.

All in all, the area covered for tea cultivation has been found in hill side rather than in plain side. We can also show the following figure.

Figure No. 3



Sources : Field Survey, 2016

5.2.6 Suitable Place for Tea Plant

The suitable place for tea plant is nursery. Here we can study about nursery management.

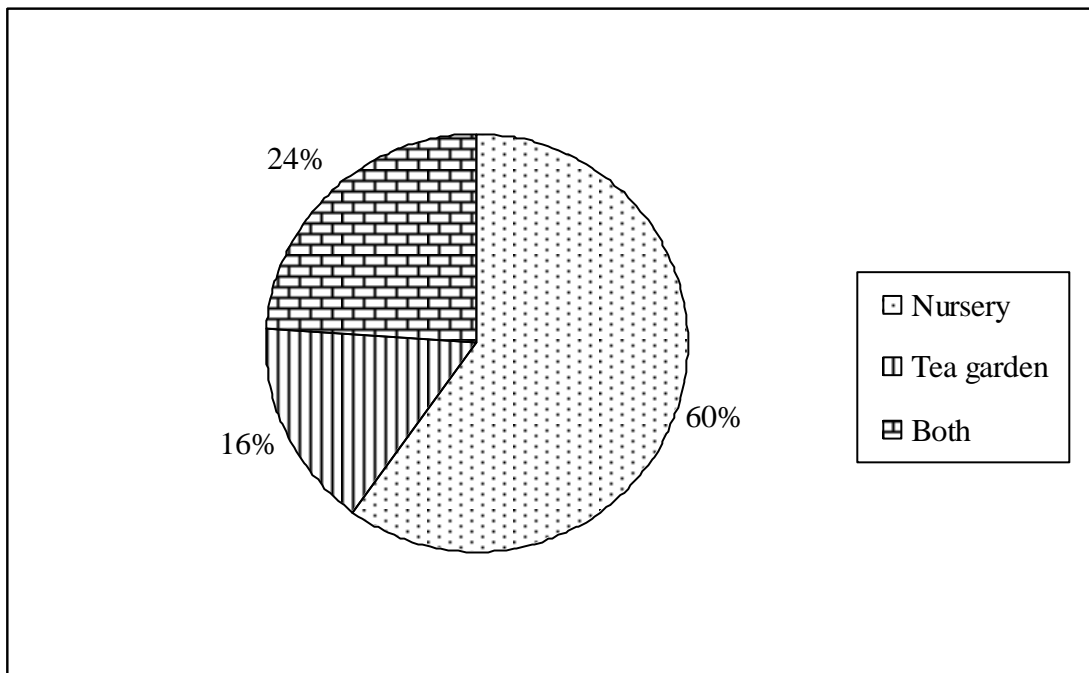
Table No. 5.6

Types of place	No. of respondents	Percentage
Nursery	30	60
Tea garden	8	16
Both	12	24
None of them	0	0
Total	50	100

Sources : Field Survey, 2016

On the above table shows that in total 50 respondents 60 percent says the suitable place for tea plant is nursery, 16 percent tea garden, 24 percent both and zero percent have been says none of them. We can also show the following figure.

Figure No. 4



Sources : Field Survey, 2016

5.2.7 Start Cutting of Tea Plant

Table No. 5.7

Cutting period	No. of respondents	Percentage
Upto 1 year	15	30
1-2 years	25	50
2-3 years	7	14
After 3 years	3	6
Total	50	100

Sources : Field Survey, 2016

The table it shows that 30 percent respondents says start cutting tea planet upto 1 year, 50 percent are 1-2 years, 14 percent are 2-3 years and 6 percent have been says after 3 years.

5.2.8 Profit from Organic Tea in Per Month

Table No. 5.8

S.N.	Profit (Rs)	No. of respondents	Percentage
1	5,000-10,000	10	20
2	10,000-15,000	15	30
3	15,000 about	25	50
	Total	50	100

Sources : Field Survey, 2016

According to the above table there are 10 respondents profit are 20 percent, 15 respondents are 30 percent and 25 respondents have been 50 percent profit. WE can saw the rate of profit, 10 respondents is low and 25 respondents have been more profit than others.

5.2.9 Expenditure from the Source of Organic Tea Cultivation

The table shows the expenditure from organic tea farming in per month is given below:

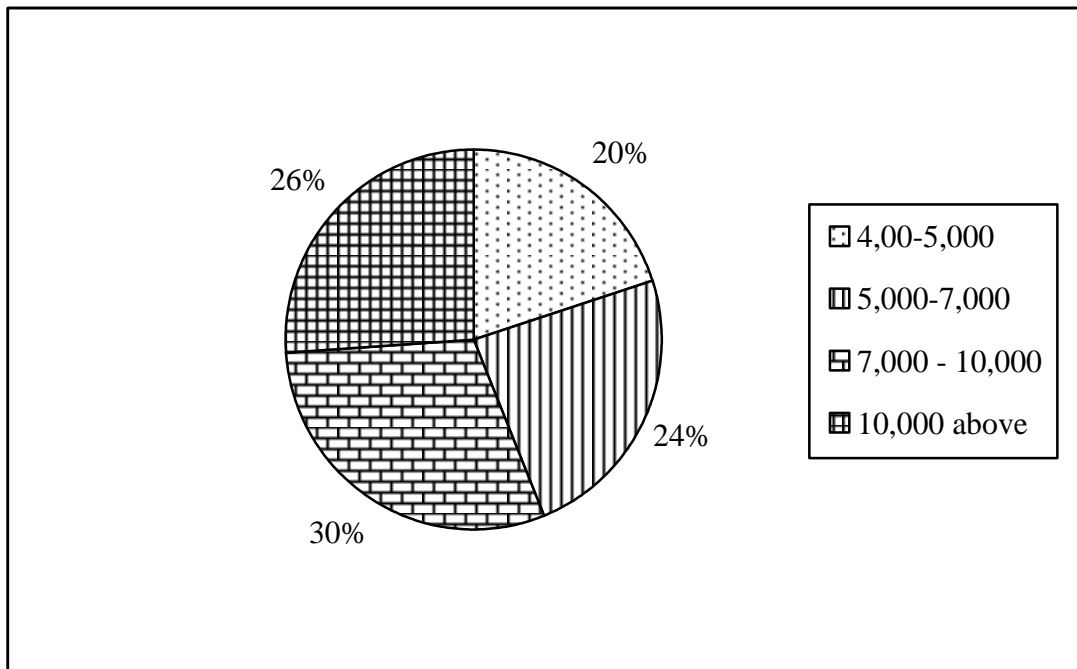
Table No. 5.9

Expenditure (per month)	No. of respondents	Percentage
4,000 - 5,000	10	20
5,000 - 7,000	12	24
7,000 - 10,000	15	30
10,000 above	13	26
Total	50	100

Sources : Field Survey, 2016

The table shows that there are total 50 respondents expenditure on the basis their income from organic tea. It shows that 10 respondents expenditure are 20 percent, 12 respondents is 24 percent, 15 respondents is 30 percent and 13 respondents expenditure have been 26 percent per month. The rate of expenditure is more 13 respondents than to others. We can also show the following figure.

Figure No. 5



Sources : Field Survey, 2016

5.2.10 Working in Garden Per Day

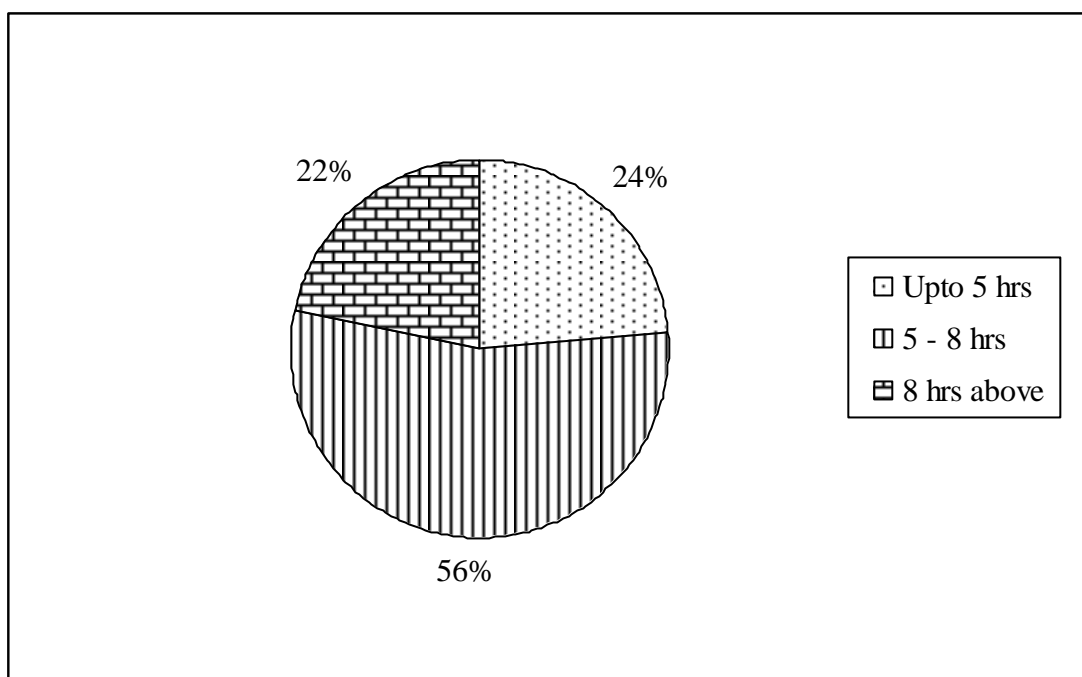
Table No. 5.10

Time (hrs.)	No. of respondents	Percentage
Upto 5 hrs	12	24
5 - 8 hrs	27	56
8 hrs above	11	22
Total	50	100

Sources : Field Survey, 2016

On the above table in all 50 respondents 24 percent are working upto 5 hrs, 26 percent 5-8 hrs, and 22 percent have been working 11 hrs in the tea garden on per day. We can also show the following figure.

Figure No. 6



5.2.11 Types of Working in Organic Tea Garden

On the given table respondents have been many types of working in organic tea garden.

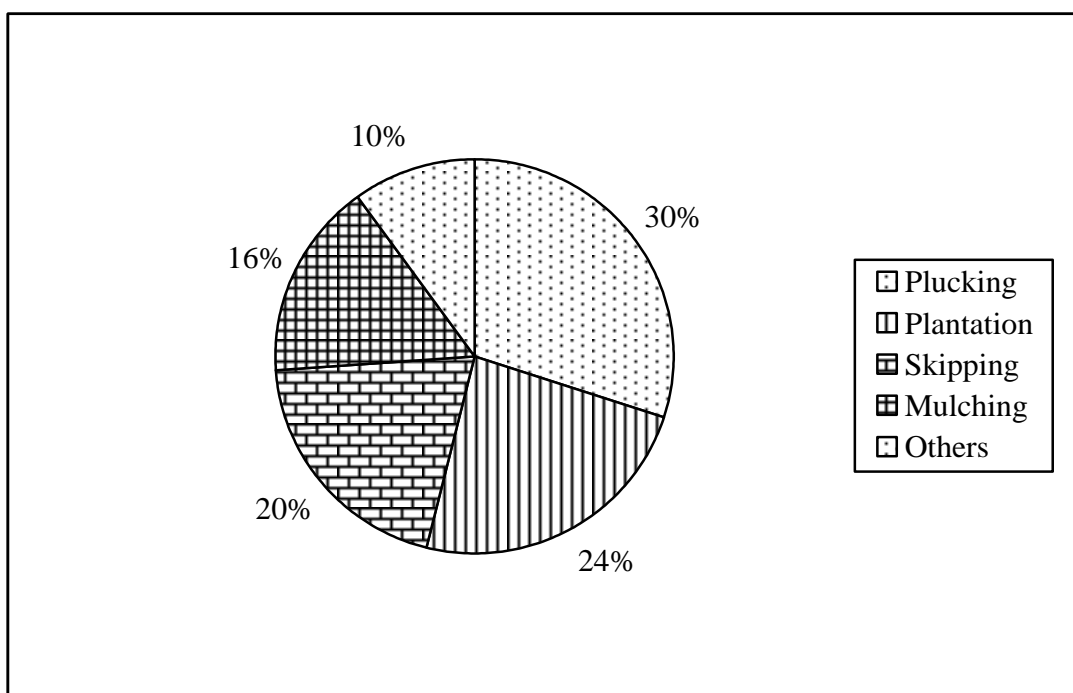
Table No. 5.11

Working types	No. of respondents	Percentage
Plucking	15	30
Plantation	12	24
Skipping	10	20
Mulching	8	16
Others	5	10
Total	50	100

Sources : Field Survey, 2016

The table it shows that 30 percent respondents have been working pluck, 24 percent are plantation, 20 percent are skipping, 16 percent are mulching and 10 percent have been working other types of work. We can also show the following figure.

Figure No. 7



5.2.12 How Long Working in Tea Garden

Table No. 5.12

Years of time	No. of respondents	Percentage
0-5	12	24
5-10	10	20
10-15	15	30
15-20	13	26
Total	50	100

Sources : Field Survey, 2016

On the table shows that out of 50 respondents 24 percent are working since 0-5 yrs, 20 percent are 5-10 yrs, 30 percent are 10-15 yrs and 26 percent have been working 15-20 yrs. in the field in organic tea garden.

5.2.13 Another Supporting Source of Livelihood

Table No. 5.13

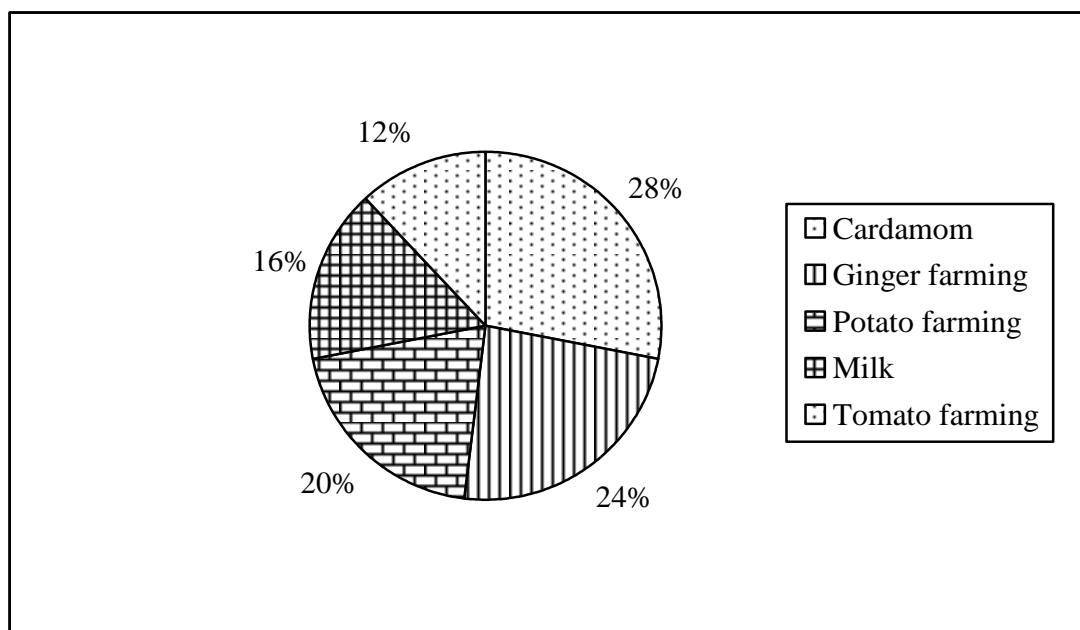
Source of income	Income per month	No. of respondents	Percentage
Cardamom	5,000	14	28
Ginger farming	3,000	12	24
Potato farming	1,500	10	20
Milk	1,000	8	16
Tomato farming	500	6	12
Total	11,00	50	100

Sources : Field Survey, 2016

First of all, in total 50 respondents 28 percent income source is cardamom, 24 percent is ginger farming, 20 percent is potato farming, 16 percent is milk and 12 percent have been earned tomato farming.

All in all cardamom has been found to be the main source with a highest income rate per month while tomato farming as a source with lowest income rate per month. We can also show the following figure.

Figure No. 8



5.2.14 Satisfaction from Selling Price

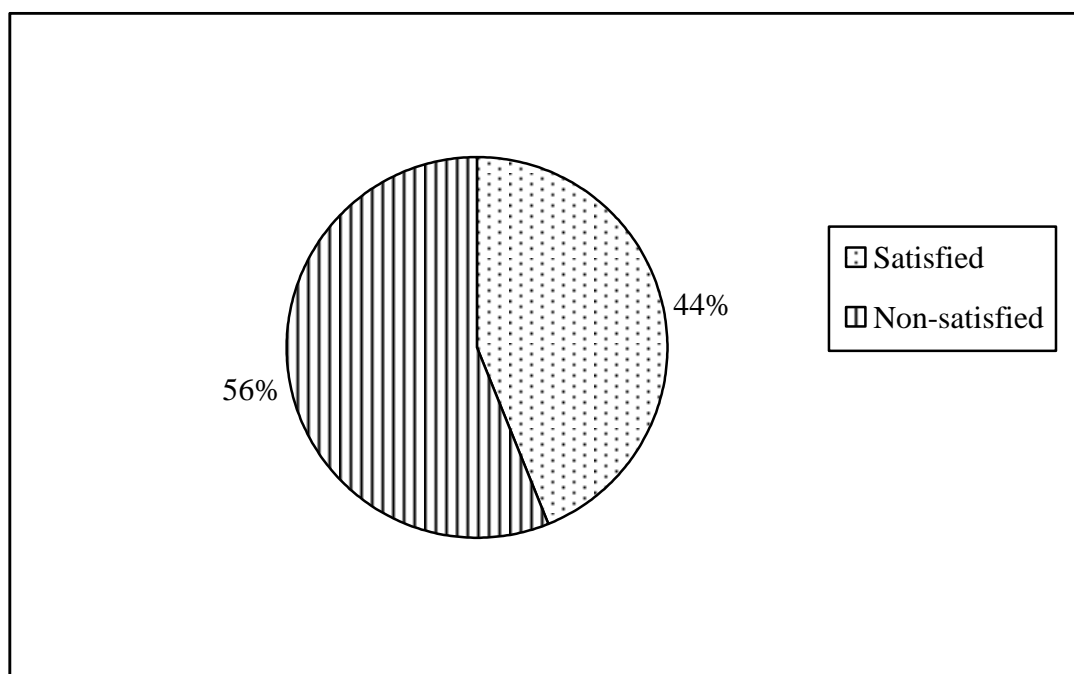
Table No. 5.14

Description	No. of respondents	Percentage
Satisfied	22	44
Non-satisfied	28	56
Total	50	100

Sources : Field Survey, 2016

The table shows the out of sampled households 44 percent households seem satisfied with selling price of organic tea, whereas 56 percent households are not-satisfies with selling price of organic tea. We can also show the following figure.

Figure No. 9



5.2.15 Own Land with Organic Tea Farmers

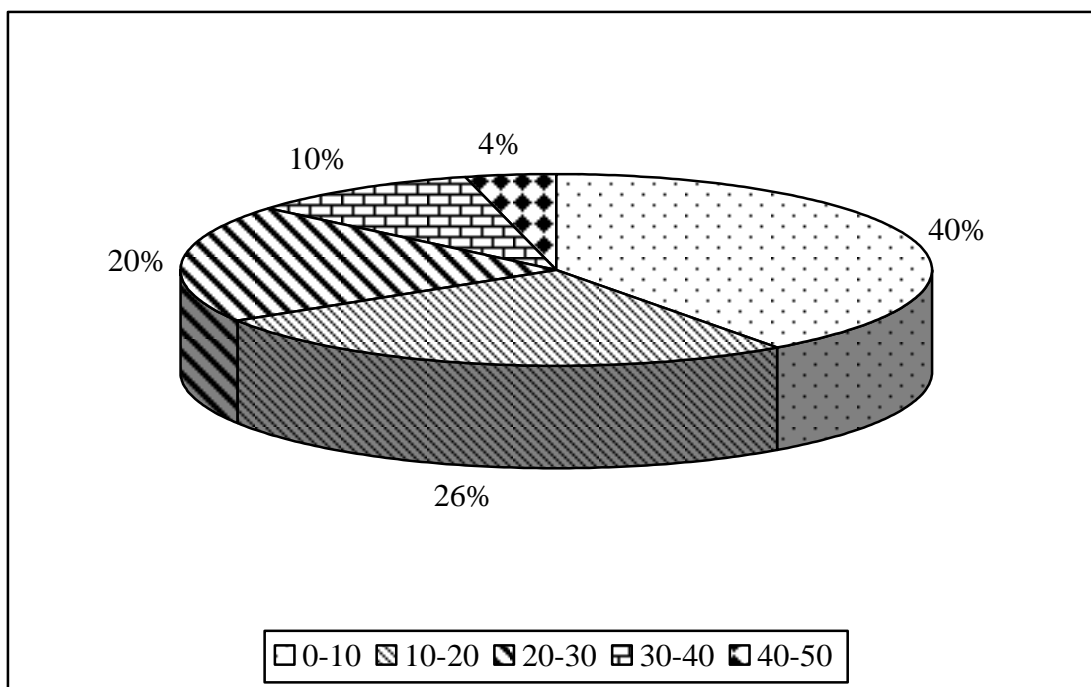
Table No. 5.15

Quantity of land (in ha.)	No. of respondents	Percentage
0-10	20	40
10-20	13	26
20-30	10	20
30-40	5	10
40-50	2	4
Total	50	100

Sources : Field Survey, 2016

On the above table shows that 20 respondents have 40 percent land, 13 respondents have 26 percent, 10 respondents have 20 percent, 5 respondents have 10 percent and 2 respondents have been 4 percent quantity of land. We can also show the following figure.

Figure No. 10



5.3 Problem and Challenges

5.3.1 Facing the Difficulties on Organic Tea Cultivation

The table shows that in all among 50 respondents who are facing by many kinds of difficulties.

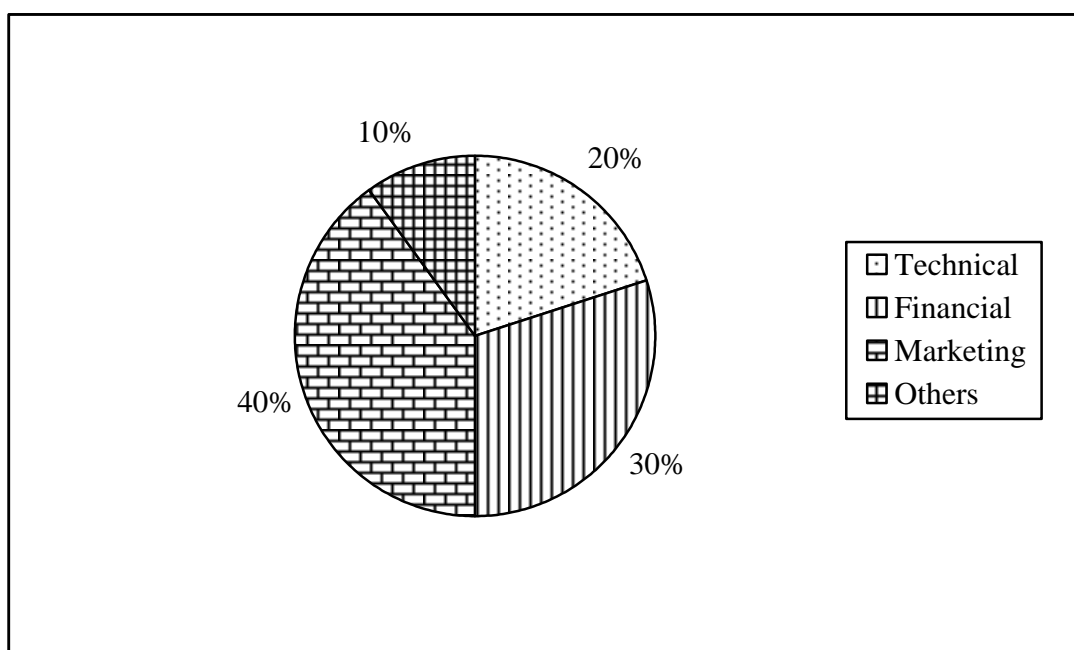
Table No. 5.16

S.N	Kinds of Difficulties	No. of respondents	Percentage
1.	Technical	10	20
2.	Financial	15	30
3.	Marketing	20	40
4.	Others	5	10
		50	100

Sources : Field Survey, 2016

On the above table 10 percent respondents facing technical difficulties, 30 percent respondents facing financial difficulties, 40 percent respondents facing marketing difficulties and 10 percent have been facing another problem. We can also show the following figure.

Figure No. 11



Sources : Field Survey, 2016

5.3.2 Organic Tea useful for Health

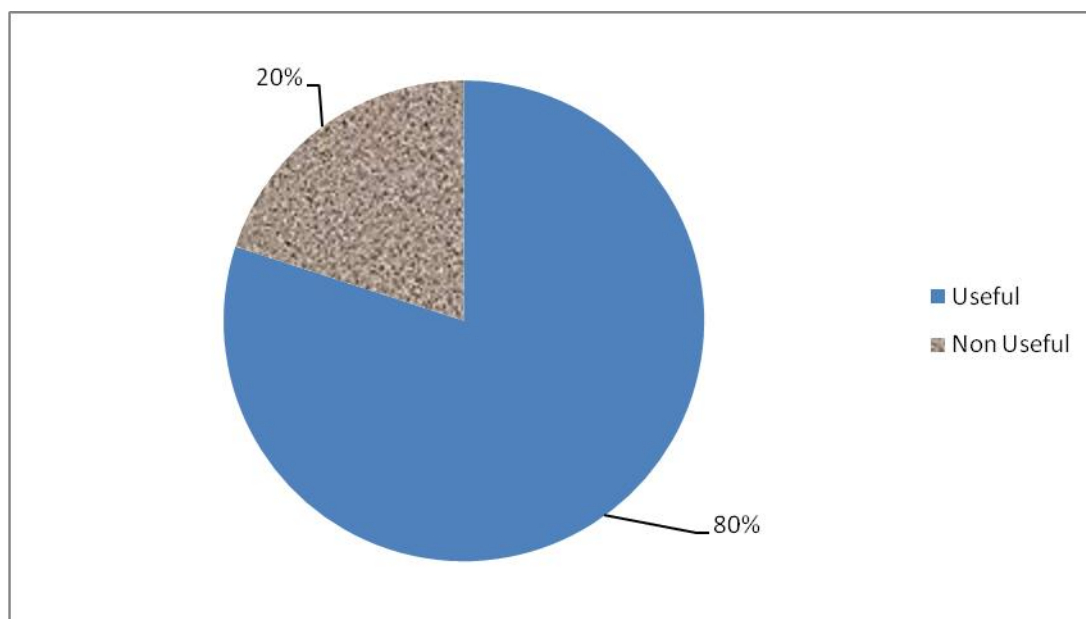
Table No. 5.17

S.N	Description	No. of respondents	Percentage
1.	Useful	40	80
2.	Non Useful	10	20
	Total	50	100

Sources : Field Survey, 2016

From the above table organic tea is more useful for health. The table shows that in 50 respondents 80 percent says useful for health and only w20 percent says that non-useful for health. We can also show the following figure

Figure No. 12



Sources : Field Survey, 2016

5.3.3 Related Organic Tea Farming with Environment

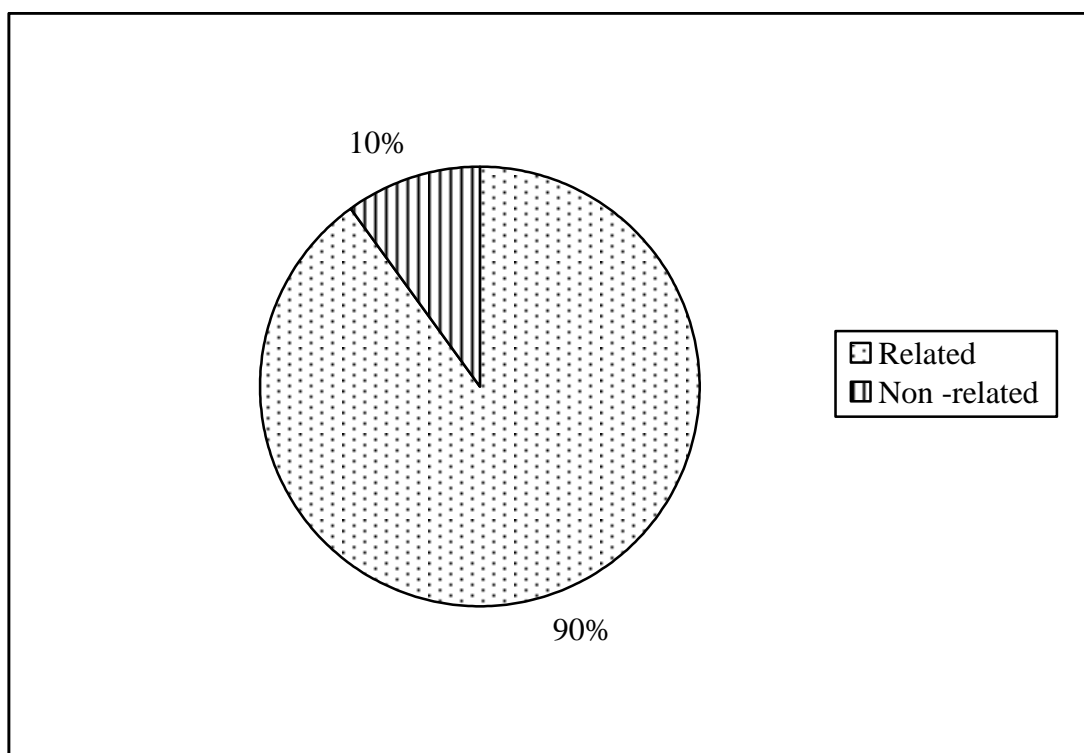
Table No. 5.18

S.N	Description	No. of respondents	Percentage
1.	Related	45	90
2.	Non -related	5	10
	Total	50	100

Sources : Field Survey, 2016

According to the above table in total 50 respondents 90 percent says that the organic tea is directly related with environment and only 10 percent are says non-related. We can conclude from this table more respondents are related tea farming with environment. We can also show the following figure.

Figure No. 13



5.3.4 Facing the Problems in Organic Tea Production

Table No. 5.19

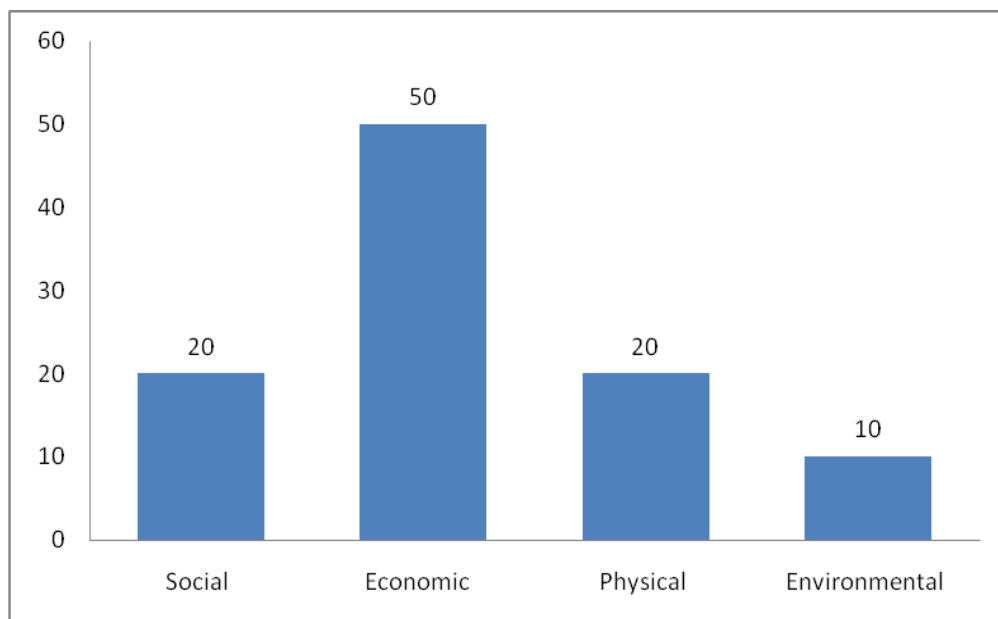
S.N	Types of Problems	No. of respondents	Percentage
1.	Social	10	20
2.	Economic	25	50
3.	Physical	10	20
4.	Environmental	5	10
	Total	50	100

Sources : Field Survey, 2016

The above table shows that out of 50 respondents 20 percent are facing social problem, 50 percent economic, other 20 percent also facing physical and 10 percent

respondents have been facing environmental problem. We can also show the following figure.

Figure No. 14



Sources : Field Survey, 2016

5.3.5 Main challenges in Organic Tea Production

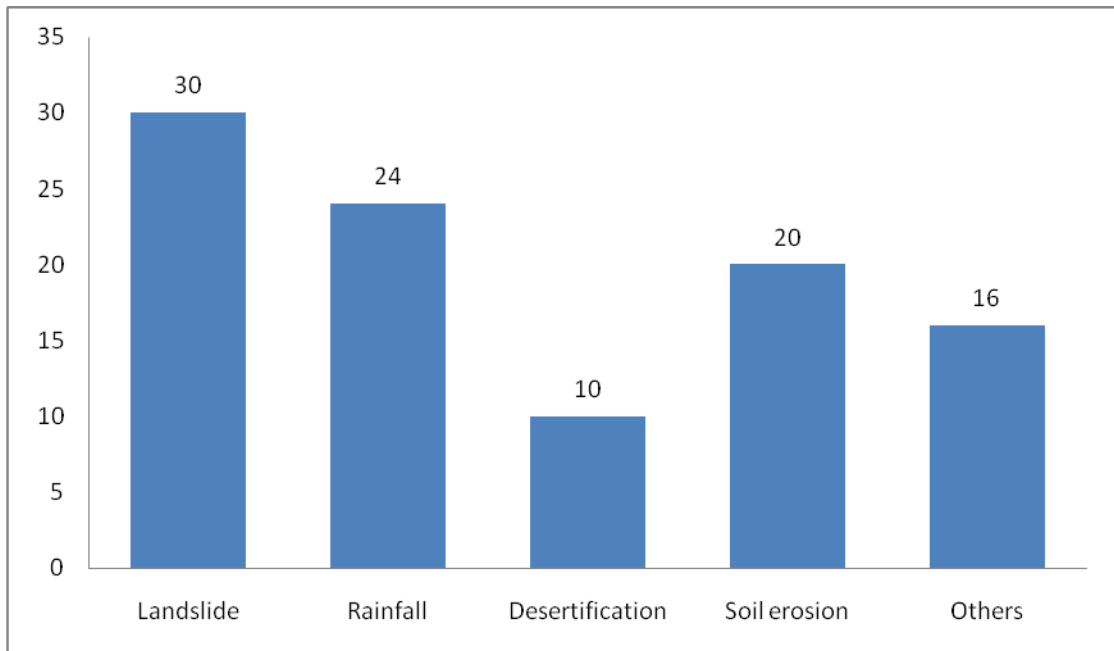
Table No. 5.20

S.N	Challenges in Production	No. of respondents	Percentage
1.	Landslide	15	30
2.	Rainfall	12	24
3.	Desertification	5	10
4.	Soil erosion	10	20
5.	Others	8	16
	Total	50	100

Sources : Field Survey, 2016

On the table it shows that in 50 respondents have been facing many kinds of challenges in organic tea production. They are facing landslide 30 percent rainfall 24 percent, decertification 10 percent, soil erosion 20 percent and others 8 percent have been facing another challenges. We can also show the following figure.

Figure No. 15



Sources : Field Survey, 2016

5.3.6 Problems in Organic Tea Marketing

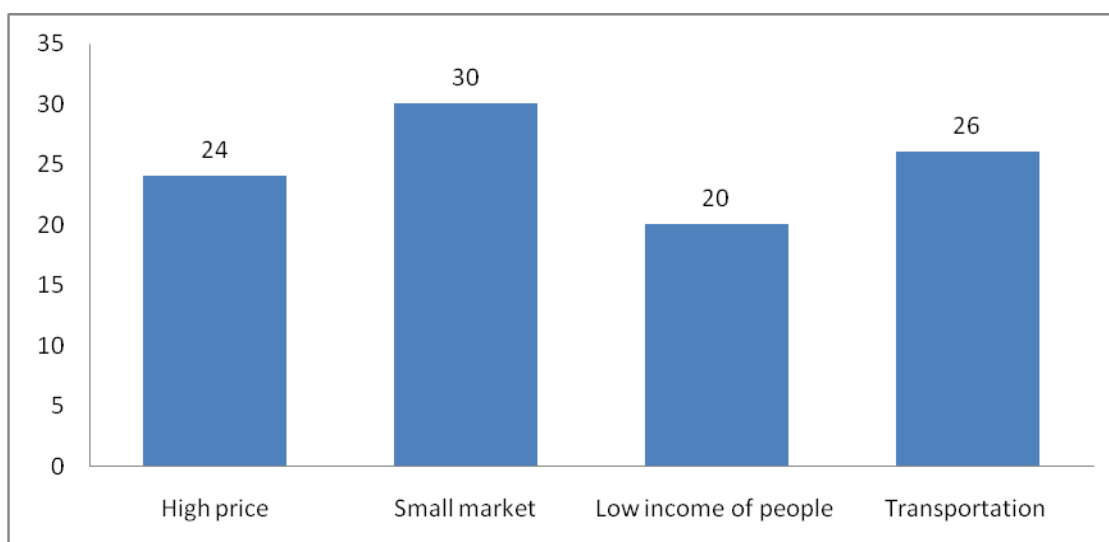
Table No. 5.21

S.N	Facing Problem	No. of respondents	Percentage
1.	High price	12	24
2.	Small market	15	30
3.	Low income of people	10	20
4.	Transportation	13	26
	Total	50	100

Sources : Field Survey, 2016

According to the table we says that 50 respondents have been facing the many kinds of problem in organic tea marketing. They are facing high price 24 percent, small market 30 percent, low income of people 20 percent and transportation have been facing 26 percent. We can also show the following figure.

Figure No. 16



Sources : Field Survey, 2016

5.3.7 Main Challenges in Organic Tea Marketing

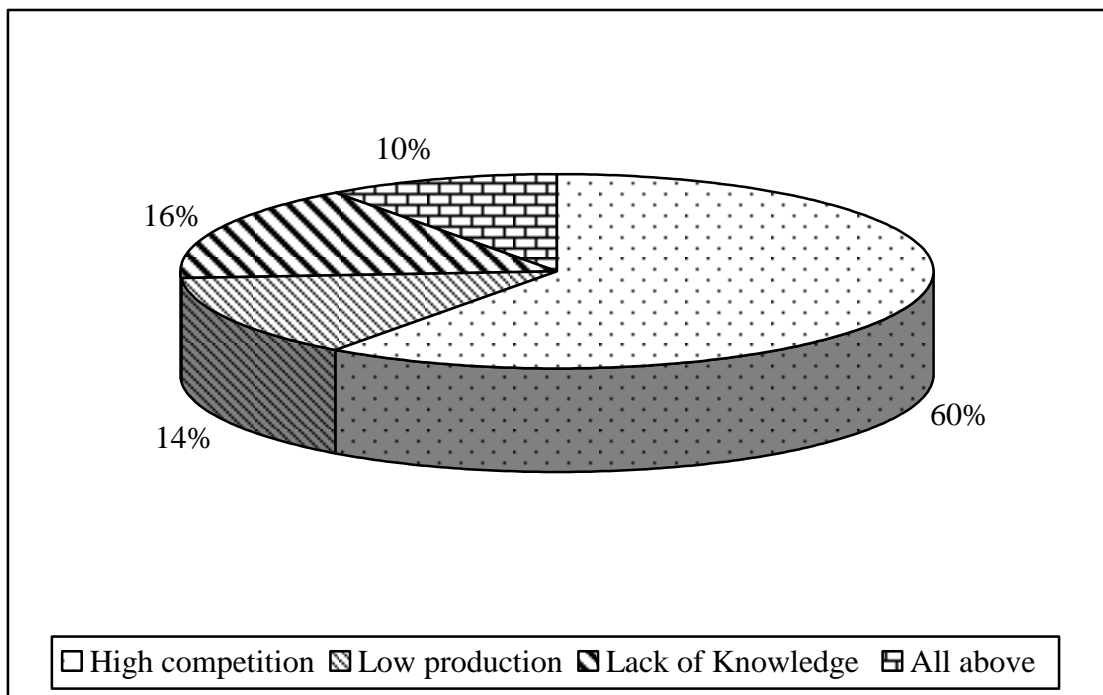
Table No. 5.22

S.N	Challenges in Marketing	No. of respondents	Percentage
1.	High competition	30	60
2.	Low production	7	14
3.	Lack of Knowledge	8	16
4.	All above	5	10
	Total	50	100

Sources : Field Survey, 2016

On the above table all 50 respondents have been facing many kinds of challenges in marketing. They are facing high competition 60 percent, low production 14 percent, lack of knowledge 8 percent and all kinds of challenges have been facing 10 percent. We can also show the following figure.

Figure No. 17



5.3.8 Expectation from Government

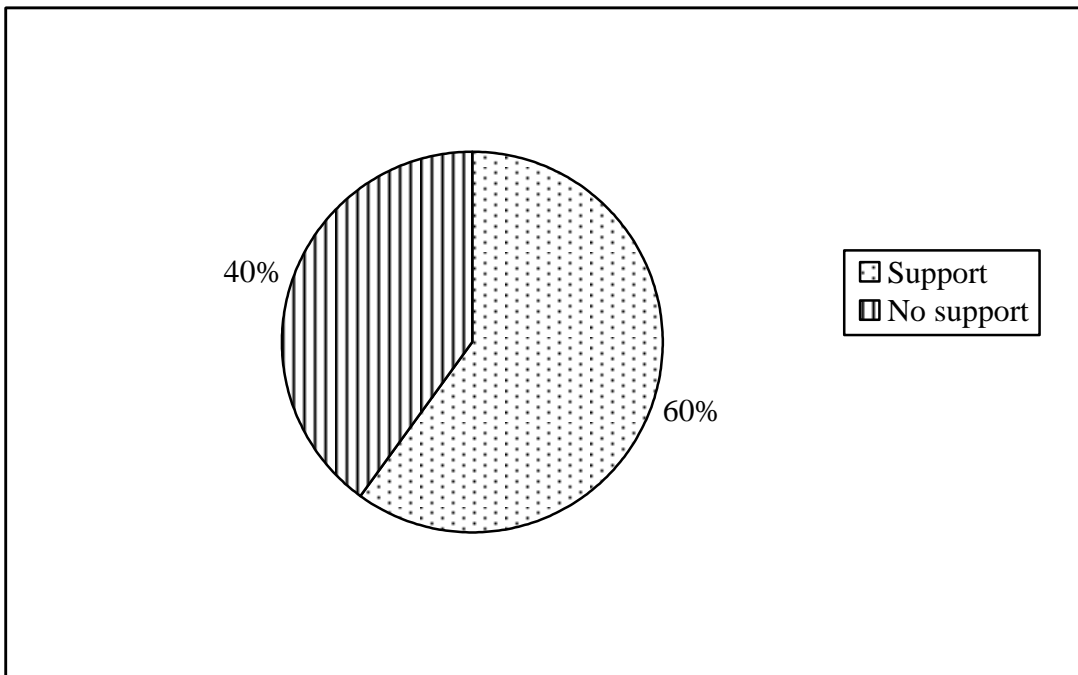
Table No. 5.23

Particular	No. of respondents	Percentage
Support	30	60
No support	20	40
Total	50	100

Sources : Field Survey, 2016

According to the table tea farmers are say that support and no support from government. We show that 60 percent says support from the aspect of government and 40 percent are says no support. We can also show the following figure.

Figure No. 18



Sources : Field Survey, 2016

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Summary

Tea cultivation has a long history of over 147 years in Nepal. it was started in eastern part of Nepal out first and extended to other parts of the country . Nepal has brought Tea from Darjeeling of India. Among the cash crops of Nepal, Jhapa, Ilam are Panchthar, Dhankuta and Terathum districts, Producing Tea At present Kavre, Sinduli, Dolakha districts are only in cultivation. It takes minimum 5 years to give production in this districts but now days these districts are producing Tea at lower quantity.

The pressure of increasing population on limited cultivated land has caused large scale in employment in the agriculture sector. Since Tea industry is labour intensive and in agro- based industry it has played a vital role in providing employment opportunity for the people.

Tea is an important consumption items. Its demand with in the domestic market is growing over time. Because of inadequate supply from the local sources, the country is even bond to export Tea from foreign countries thus draining the hard earned foreign currency.

Tea production involves two broad phases like. Cultivation phase and industrial phase each having sub phases. They are planting pruning plucking relating and flushing related to cultivation phase. Withering Rootling fermentation, Drying Grading, Staving and Packing are related with the industrial phase. These phases are to be followed in proper way.

Nowadays there are many Tea producing countries in the world. In Nepal Ilam panchathar, Dhankuta and Jhapa is the main site of Production.

Orthodox Tea is cultivating in Terthum, Nuwakot, Sindhupalanchock, Ramechap, Sankhuwasabha and Kaski. Nepal produces about 1.97 million kg Orthodox Tea. It is chiefhy exported to countries like Jhapan, Germany, USA,India and other SAARC countries.

Tea cultivation was started in Nepal from 1920 B.S. by Mr Gaj Raj Singh Thapa. He had taken Tea plants from Darjeeling district of India. Before the establishment of the NTDC, Ilam and Saktim were the two Tea gardens in Nepal as private estates. When the NTDC is established as a company in 1966 to manage these two estates it was not limited only on two but also had created other five gardens under it self called Kanyam, Tokla Barne, Baradashi and Chilingkot. But its production quantities were decreasing gradually after 1995/96 its main causes was mismanagement and political interference so NTDC was privatized the result has not come according to the management of Leaser Company.

Other Tea industrial Institutional in Nepal is National Tea and Coffee Development Board (NTDCB) established in 2049 B.S. Of which main functions were to help and guide extension and cultivation of Tea qualitative production, Proper management for its market.

Besides these Himalayan Organic Tea Planters Association Mechi Hill Tea Producers Association Nepal Tea Development Alliance Nepal Tea Planters Association and different Tea co-operative societies are playing a pivotal role for the production, processing and marketing of Tea in Nepal.

6.2 Conclusions

This study concluded that the role of the cultivation in Nepal is growing steadily despite various problems they encounter. All most all the villagers of eastern part of Nepal and other region have Tea plantation in this own land Presently farmers have started to plant Tea even in their growers have several problems at the field, transportation problems financial problems, unsteadily policies technical problems etc However, the interest of Tea plantations rapidly growing among the farmers of Nepal. They believe that Tea cultivation is sustainable means of uplifting their life standard. It is essential to promote Nepalese Tea nationally and internationally. The exported Tea of Nepal has received good market but it is not promoted properly internationally. The major findings of the study are as follows :

- i. The cultivation of Tea is increasing every year. Jhapa, Ilam, Panchthar, Dhankuta and Terathum are main Tea plantation districts of Nepal. There were only 965 hectors Tea plantations except those five districts in 2009/2010.

- ii. Tea cultivation area under private sector and small farmers showed positive sign for plantation of Tea and build up awareness on plantation of Tea to the people The Tea plantation and production per hector is gradually increased in Nepal.
- iii. The productivity of Tea under private sector and small farmers sector is increasing in the whole study period the small farmers productivity rate higher than private sector.
- iv. This study showed that the garden sector has high position in the Tea cultivation and production than small farmers sector in the fiscal year 2009/2010.
- v. Jhapa District is highest position in tea production and tea cultivation area in garden sector but second in plantation area is smallholder sector.
- vi. Ilam district is highest position in cultivation area to small farmers sector.
- vii. Many problem are in tea industry such as lack of finance, trained manpower tea specialist lack of transportation. Nepal does not produce processes in quantities desired by the market. Small farmers are not desirable to manufacture quality made in Nepal. The tea leaves produced by Tea estates having processing facilities are also not qualitative to produced a good quality made Tea However private sector and smallholder have tried to enhance it. Government cannot manage action of tea market until now. Tea policy 2000 has launched in Nepal.
- viii. Frequently, fluctuating Tea is common nature of its market. Nepalese Tea market is unscientific, unorganized and limited. It's needed that establishment of well organized market to provide real return to the nation and to promote the quantity and quality.

6.3 Recommendations

Agriculture has been playing a significant role in the economy of Nepal. Economic development is not possible without agriculture prosperity Nepali planner have over the years given top priority to this sector. It provides employment opportunities to the labor force and contributes the Gross Domestic Product (GDP).

This study shows that the plantation and production of Tea are increasing every year. Private sectors are investing in Tea industry. Smallholders are also interested in Tea cultivation. It brings serious problem in the Tea industries in many ways. It is essential to make lot of improvements in Tea cultivation:

The following measures should be taken to solve the problems.

- i. In Nepal Tea cultivation is depended on monsoon rains serious attention must be taken to improve the irrigation facilities by the government agencies.
- ii. Many people cannot solve their agricultural program due to poverty. So agricultural loan is necessary for them Tea Industry requires a large initial investment but gives return after 5/6 years. Therefore the government has to formulate appropriate loan policies in this sector.
- iii. The price is declared by India market. Since about half to the domestic demand is fulfilled by Indian Tea Therefore it is recommended that Tea production should be increased in the country.
- iv. Tea industry is establish as well as developed industry in the world. So, it is cultivated with full encouragement in order to get higher price but the fluctuation of Tea price within a short period, farmers and exporters often discourage for this crop. So, government should establish minimum support price to the profitable level.
- v. Proper marketing network and institution should be established so that the fluctuation of price would be controlled.
- vi. Soil erosion landslide and flood are major problems of Nepal. Local cultivators should be educated in this regard to avoid it should initiated in landslide prone area.
- vii. Government should provide transportation facilities by building sub agricultural tracks. To provide the facilities for tea producers, transportation facilities extended in Tea growing areas.
- viii. Tea is the main income source of Nepal. So, the conservation of tea garden is needed to be control natural disaster.

- ix. Clean environment is most important part for our health. Therefore, organic tea is directly related to keep clean environment. For its reason we need to expansion of organic tea cultivation.
- x. It can helps to growth national income because it is modern farming of eastern part of world as well Nepal. So the organic tea is valuable cash crop and need to in global market.
- xi. Nepal is a poor and underdeveloped country. More than 80 percent population depends in agriculture. Farmers can rapidly earn money its farming and also need to be priority to product organic tea.
- xii. Academic curriculum must be include this subject.
- xiii. In fact, Nepal is a rural agricultural country but here is a strong irony. Day by day, the cultivation of Nepal is backwardness. We must need to solve this problem up to the economic status of people.

REFERENCE

- Acharya, D. (2009). *Tea annual smarika*. Kathmandu : NTCDB.
- Acharya, B. (2012). *Tea annual smarika*. Kathmandu : NTCDB.
- Amatya, S.L. (1975). *Cash crop farming in Nepal*. Kathmandu: T.U., Geography Instruction Committee.
- Banskota, D.R. (2009). *One hand of organic tea production in Nepal*. Kathmandu : Tea Farmer Newsletter
- Chhetri, G.K. (2004). *Tea marketing of Ilam districts: A retrospective view*. An Unpublished Master's Dissertation Submitted to Faculty of Management, Shankar Dev Campus, T.U. Kathmandu.
- Gajmer, P.B. (2009). *Tea smarika*. Kathmandu: NTCDB.
- Joshi, R.K. (1978). *Feasible expansion of tea industry in Nepal*. Kathmandu: (CEDA) T.U.
- Arunachalam, K. (1995). *A hand book on Indian tea*. Arunacham Associates, Joyce Hotel Road. Arunacham.
- Kansakar, V.B.S. (1985), *Migration and employment in the tea estates of Nepal*. CEDA T.U. Kathmandu.
- Koirala, G. (1983). *A study of tea plantation in Nepal*. An Unpublished M.A. Dissertation, Department of Geography, T.U., Kritipur, Kathmandu.
- NTCDB (2002). *A souvenir on the national tea day*. Tea-A Tea, Kathmandu: Nepal Tea and Coffee Development Board, Central Office.
- Oli, T.P. (2009). *Tea smrika*. Kathmandu: NTCDB.
- Pant, R.P. (2065 B.S.). *Social science research and thesis writing*. Kathmandu.
- Sapkota, K.B. (2011). *Annual tea-coffee smarika*. Kathmandu: Nepal Tea and Coffee Development Board.

Shrestha, K.P. (1982). *A study of tea with special reference to export promotion*. An unpublished Master's dissertation submitted to faculty of management. T.U. Kirtipur Kathmandu.

Subba N. & Ghimire K. (2011). *Organic orthodox tea farming management technology*. Dhankuta: Agriculture Research Center Pakhribas.

Subedi, B.R. (2057 B.S.). *Modern tea farming technology*. Kathmandu : Laxmi Offset Press.

ANNEX 1

Questionnaire on Organic Tea Cultivation

Household Survey

1. Name :-
2. Address :-
3. Age :-
4. Religion :-
5. Caste
6. Family size and marital status
 - a) Married b) Unmarried
 - c) Widow d) Divorce e) Total
7. Education status of respondents.
 - a) Literate b) Illiterate
8. Which crops do you cultivate in your land mostly ?
 - a) Tea b) Coffee
 - c) Maize d) Paddy
9. In which place you find appropriate for cultivate tea farming ?
 - a) Hill side b) Plain side c) Both
10. Which place suitable for tea plant ?
 - a) Nursery b) Tea garden
 - c) Both d) None of them
11. After which period grown of tea plant start cutting ?
 - a) Upto 1 year b) 1 - 2 years
 - c) 2-3 years d) Other
12. Which material using to prepare organic tea ?
 - a) Modern tools b) Manually
13. Have gat any profit from organic tea garden ?
 - a) Yes b) No

If yes, how much profit do you get form tea cultivation per month ?

 - a) Rs 5,000 - 10,000 b) 10,000 - 15,000
 - c) 15,000 above

14. What is your families annual expenditure in the following items ?

S.N.	Expenditure	R.S.
	Food	
	clothes	
	Education	
	Health	
	Festivals	
	Others	

15. How many hours do you work in garden on daily basis or per day ?

- a) Upto 5 hours, b) 5 - 8 hours c) above 8 hours

16. What kind of work you have to do ?

- a) Plucking b) Plantation
 c) Skipping d) Mulching
 e) Others.

17. Have you received any training before the work.

- a) Yes b) No

18. How long you have been working in tea cultivation ?

- a) 0-5 year b) 5-10 year
 c) 10-15 year d) 15-20 year

19. Have you other supporting source of livelihood ?

- a) Yes b) No

If yes, please specify

20. Are you satisfied with your work

- a) Yes b) No

If why no ?

21. How many members of your family are employed in garden ?

22. Can you afford your family by your garden ?

23. Do you have own land ?

- a) Yes b) No.

If yes how much land you have got ?

.....

24. What are the present problems that you are facing for organic tea farming ?

.....

ANNEX 2

Focus Group Discussion

1. When did you staying in here and how did you feel about tea cultivation practice ?
2. Why did you start tea cultivation and is it beneficial ?
3. What are the main problems about tea cultivation and how come these be overcome ?
4. What are you doing for solve these problems ?
5. What should be done to promote and development for tea cultivation ?

ANNEX 3

Key Information Interview Checklist

1. What you want to say about organic tea cultivation is the source of good income from other crops ?
2. About how many households are engaged in organic tea cultivation in this area?
3. What is your role for promotion and development of tea cultivation in your area ?
4. In your opinion how can we increasing tea production and attracted toward tea cultivation ?
5. How other I/NGO, organization, government are helping in tea cultivation for betterment in this region and what are the reaction of peoples by those help provided by organization ?
6. What is the attitude of local people toward tea cultivation ?
7. What is their expectation for the days to come ?